Curriculum

FIRST YEAR

Semester-1/2

- Linear Algebra/ Calculus and Differential Equations
- Chemistry
- Physics
- Environment Studies
- Computer Programming
- Engineering Graphics
- Elements of Electrical and Electronics Engineering
- English Communication
- Mechanical Workshop
- Electrical Workshop
- Introduction to Engineering

Supplementary Courses

- Design Thinking
- ICT Tools and Cyber Security
- Critical Thinking
- Yog and Meditation

SECOND YEAR

Semester-3

- Heat Transfer Operations
- Fluid Flow Operations
- Solid Fluid Operations
- Organic Chemistry
- Applied Mathematics for Chemical Engineering
- Principles of Management

Supplementary Course

- Community Services

Semester-4

- Mass Transfer Operations-I
- Chemical Process Industries
- Instrumentation and Process Control
- Chemical Engineering Thermodynamics
- Process Calculations
- Principles of Economics

THIRD YEAR

Semester-5

- Mass Transfer Operations-II
- Environmental Pollution Control and Safety Management
- Modeling and Simulation
- Department Elective –I
- Open Elective-I
- Open Elective-II

Semester-6

- Chemical Reaction Engineering-I
- Process Equipment Design
- Department Elective-II
- Department Elective-III
- Open Elective-III
- Humanities Elective

FOURTH YEAR

Semester-7

- Chemical Reaction Engineering-II
- Plant Design, Economics and Project Management
- Department Elective-IV
- Department Elective-V
- Open Elective-III
- Open Elective-IV
- Minor Project
- Summer Internship

Semester-8

- Major Project

ELECTIVE SUBJECTS

Food Technology, Pharmaceutical Technology, Nanotechnology in Chemical Sciences, Dye and Dye Intermediates Technology, Fertilizer Technology, Polymer Technology, Advanced Separation Techniques, Advances in Chemical Process Control, Process Integration, Air Pollution Control Engineering, Renewable Energy Sources, Wastewater Engineering, Applied Chemical Engineering Thermodynamics, Process Optimization, Unit Processes, Process Plant Utilities and Energy Efficiency, Bioprocess and Bioseperation Engineering, Fundamentals of Piping Design, Environmental Impact Assessment, Transport Phenomena